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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)			
	10/553,721	WOLOVITZ ET AL.			
Office Action Summary	Examiner	Art Unit			
	BLAKE RUBIN	4152			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>17 Oct</u> This action is FINAL . 2b)⊠ This Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-37 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-37 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 10/17/2005 is/are: a) ☐ Applicant may not request that any objection to the or	vn from consideration. relection requirement. r. l accepted or b) □ objected to by				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/17/2005. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:					

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DETAILED ACTION

1. This action is a response to communications filed October 17, 2005.

2. Claims 1-37 are pending in this application. The application is a 371 of PCT/GB04/01685 filed April 19, 2004, which further claims foreign priority to United Kingdom patent application priority # 0308991.9, filed April 17, 2003.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it exceeds 150 words, and is not limited to a single paragraph. Appropriate correction is required. See MPEP § 608.01(b).

Claim Objections

5. With respect to claims 3 and 4, the claims recite the limitations "the connection" (lines 2 and 3), there is insufficient antecedent basis for these limitations in the claim. The examiner suggests amending line 2 to recite "a connection" to resolve the indefiniteness. Appropriate correction is required.

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6. With respect to claims 6 and 7, the claims recite the limitations "the network connection" (line 3), there is insufficient antecedent basis for these limitations in the claim. The examiner suggests amending line 3 to recite "a network connection" to resolve the indefiniteness.

Appropriate correction is required.

- 7. With respect to claim 10, the claim recites the limitation "the wireless terminal" (line 3), there is insufficient antecedent basis for this limitations in the claim. The examiner suggests amending line 3 to recite "a wireless terminal" to resolve the indefiniteness. Appropriate correction is required.
- 8. With respect to claims 12 and 13, the claims recite the limitations "the connection" (line 2) and "the next message" (line 3), there is insufficient antecedent basis for these limitations in the claim. The examiner suggests amending line 2 to recite "a connection" and line 3 to recite, "a next message" to resolve the indefiniteness. Appropriate correction is required.
- 9. With respect to claim 21, the claim recites the limitation "the corresponding data" (line 2), there is insufficient antecedent basis for this limitation in the claim. The examiners suggestion with respect to claim 20, above, would potentially resolve the indefiniteness, otherwise reciting " the corresponding data" in line 2 would also resolve the indefiniteness. Appropriate correction is required.
- 10. With respect to claim 23, the claim recites the limitation "the large server" (line 3), there is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending

line 3 to recite "the large server" to resolve the indefiniteness. Appropriate correction is required.

- 11. With respect to claim 24, the claim recites the limitation "the wireless terminal" (lines 2 and 4), and "the original format" (line 2) there is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending line 2 to recite "a wireless terminal in either an original format" to resolve the indefiniteness. Appropriate correction is required.
- 12. With respect to claim 25, the claim recites the limitation "the corresponding data" (lines 2-3), there is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending lines 2-3 to recite, "the corresponding data" to resolve the indefiniteness. Appropriate correction is required.
- 13. With respect to claim 26, the claim recites the limitations "the application" (line 1) and "the actual IP address" (lines 2-3), there is insufficient antecedent basis for these limitations in the claims. The examiner suggests amending line 1 to recite, "the <u>software</u> application" and lines 2-3 to recite, "<u>an</u> actual IP address" to resolve the indefiniteness in the claims. Appropriate corrections are required.
- 14. With respect to claim 27, the claim recites the limitation "the address" (line 1), there is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending line 1 to recite, "the <u>actual IP</u> address' to resolve the indefiniteness (with the assumption that claim 26 has been corrected according to the examiners suggestion, or is otherwise consistent with the amending limitation). Appropriate correction is required.

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15. With respect to claims 28 and 32, the claims recite the limitation "the application" (line 1), there is insufficient antecedent basis for this limitation in the claims. The examiner suggests amending line 1 to recite, "the <u>software</u> application" to resolve the indefiniteness in the claims. Appropriate correction is required.

- 16. With respect to claim 31, the claim recites the limitation "the terminal component sends a challenge to any third party" (lines 1-2), there is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending lines 1-2 to recite, "the terminal—side component sends a challenge to <u>a</u> third party" to resolve the indefiniteness in the claim. Appropriate correction is required.
- 17. With respect to claim 33, the claim recites the limitations "the communications platform" (line 1) and "the platform" (line 3), there is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending lines 1 and 3 to recite, "the <u>distributed</u> <u>communications</u> platform" to resolve the indefiniteness in the claim. Appropriate correction is required.
- 18. With respect to claims 35-37, the claims are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

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Claim Rejections - 35 USC § 101

19. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

20. Claims 1-33 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

21. Claims 1 and 34 recite, "a software application," (lines 1-2), followed by the execution of

functionally descriptive material. The medium containing the functionally descriptive material

includes no physical embodiment, and therefor is directed towards non-statutory subject matter.

See MPEP 2106.01:

a. When functional descriptive material is recorded or stored on some computer-

readable medium, it becomes structurally and functionally interrelated to the medium

and will be statutory in most cases since use of technology permits the function of the

descriptive material to be realized.

22. Dependent claims 2-33 fail to resolve the deficiency of independent claim 1, and are

therefor rejected on the same grounds as above.

Claim Rejections - 35 USC § 112

23. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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24. Claims 8, 9, 12, 13, 20-23, 24, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- 25. With respect to claims 8 and 9, the claims recite the limitation "queued events" (line 1), it is not clear how this limitation is related to the previously mentioned "create events and queue those events", rendering the claim indefinite. The examiner suggests amending line 1 to recited "the queued events" to resolve the indefiniteness. Appropriate correction is required.
- 26. With respect to claims 12 and 13, the claims recite the limitation "a message queuing system on the terminal side" (line 1), it is not clear how this limitation is related to the previously mentioned "message queuing system" and "terminal side", rendering the claim indefinite. The examiner suggests amending line 1 to recite "the message queuing system on the terminal-side component" to resolve the indefiniteness. Appropriate correction is required.
- 27. With respect to claim 20, the claim recites the limitation "without affecting the corresponding data stored on the terminal" (lines 3-4), it is not clear how this limitation is related to the previously mentioned "deletes data stored on the terminal" (line 2), rendering the claim indefinite. It appears that the two limitations are contradictory, and would render the functionality inoperable. The examiner suggests amending lines 3-4 to recite "without affecting the corresponding data stored on the <u>server</u>" to resolve the indefiniteness. Appropriate correction is required

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28. With respect to claims 21-23, the claims fail to resolve the deficiency of claim 20, and

are therefor rejected on the same grounds as above.

29. With respect to claim 24, the term "more" in line 3 is a relative term which renders the

claim indefinite. The phrase "more useable format" is not defined by the claim, the specification

does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the

art would not be reasonably apprised of the scope of the invention. The examiner suggests

amending line 3 to recite "more useable format" to resolve the indefiniteness. Appropriate

correction is required.

30. With respect to claim 29, the term "small" in line 2 is a relative term which renders the

claim indefinite. The phrase "small, dedicated message" is not defined by the claim, the

specification does not provide a standard for ascertaining the requisite degree, and one of

ordinary skill in the art would not be reasonably apprised of the scope of the invention. The

examiner suggests amending line 2 to recite "small dedicated message" to resolve the

indefiniteness. Appropriate correction is required

Claim Rejections - 35 USC § 102

31. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United

States.

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32. Claims 1-2, 10, 14-16, 19, 26, and 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Logston et al (PCT International Publication No. WO 01/77815 A2, hereinafter Logston). Logston is cited by applicant in IDS filed on August 17, 2005.

- 33. With respect to claim 1, Logston discloses a data access, replication or communications system (page 1, lines 16-19) comprising a software application (page 1, lines 29-31) that is distributed across a terminal-side component (page 1, lines 32-34, *DACP*) running on a terminal (page 2, lines 1-3, *client devices*) and a server-side component (page 1, lines 32-34, *DASP*); in which the terminal-side component and the server-side component (i) together constitute a client to a server (page 2, lines 25-26) and (ii) collaborate by sending messages (page 8, lines 27-28) using a message queuing system (page 19, lines 23-25) over a network (page 1, line 23).
- 34. With respect to claim 2, Logston discloses the system of claim 1 in which the message queuing system is message oriented middleware (page 15, lines 32-33).
- 35. With respect to claim 10, Logston discloses the system of claim 1 in which the terminal-side component and the server-side component collectively constitute middleware (page 1, lines 31-34, where middleware is anticipated by the *distributed application*) between a terminal program (page 1, lines 31-34, *DACP*) running on the wireless terminal (page 2, lines 3-4) and a server program (page 1, lines 31-34, *DASP*) running on the server (page 1, lines 31-34).

36. With respect to claim 14, Logston discloses the system of claim 1 in which the terminal-side component processes events from a terminal program (page 8, lines 32-33, *software program*), which is an e-mail or PIM program (page 9, line 3).

- 37. With respect to claim 15, Logston discloses the system of claim 1 in which the server-side component processes events from a server program (page 9, lines 31-33), which is a mail server program (page 9, line 3).
- 38. With respect to claim 16, Logston discloses the system of claim 1 in which the terminal is a wireless terminal (page 2, lines 3-4) such as a mobile telephone or smartphone (page 2, lines 3-7, *cellular telephones and personal digital assistants*).
- 39. With respect to claim 19, Logston discloses the system of claim 1 in which the server-side component can assemble a message (page 12, lines 19-23, downloads from the original master) that the terminal-side component wishes to send (page 12, lines 19-23, based on profiling of the first slave) by using data held on the server (page 12, lines 19-23, selectively "passed through" without utilization by the first slave) in order to avoid that data needing to be sent over the network from the terminal (page 12, lines 19-23, selectively "passed through" without utilization by the first slave).
- 40. With respect to claim 26. The system of claim 1 in which the application enables the correct routing (page 10, lines 23-24) of messages addressed to a terminal identified by an ID (page 23, lines 7-9, *identifier*) by mapping that ID to the actual IP address needed to reach the terminal (page 23, lines 10-15).

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41. With respect to claim 32, Logston discloses the system of claim 1 in which the application comprises a distributed application platform (page 7, lines 19-21) that makes calls ([age 2, lines 32-34, *used on the network*) to a distributed communications platform (page 2, lines 29-34, *the given network*).

- 42. With respect to claim 33, Logston discloses the system of claim 32 in which the communications platform enables delivery of a message (page 2, lines 23-25) over the network to be reliable (page 17, lines 15-18), even if an unreliable transport protocol is used (page 17, lines 15-18, *UDP*), in which the platform operates in a session independent manner (page 17, lines 18-21, *redundant transaction ID numbers*).
- 43. With respect to claim 34, Logston discloses a method of data access, replication or communication (page 1, lines 16-19) comprising the steps of: (a) running a software application (page 1, lines 29-31) that is distributed across a terminal-side component (page 1, lines 32-34, *DASP*) and a server-side component (page 1, lines 32-34, *DASP*), in which the terminal-side component and the server-side component together constitute a client to a server (page 2, lines 25-26) (b) sending messages between the terminal-side component and the server-side component (page 8, lines 27-28) using a message queuing system (page 19, lines 23-25) over a networks (page 1, line 23).

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Claim Rejections - 35 USC § 103

44. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 45. Claims 3-9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claims 1 and 10 above, in view of Piskiel et al (PCT International Publication No. WO 97/46939, hereinafter Piskiel). Piskiel is cited by applicant in IDS filed on August 17, 2005.
- 46. With respect to claim 3, Logston discloses the system of claim 1, but does not disclose insulation from a broken network connection.
- 47. However, Piskiel discloses insulation of a terminal program (page 4, lines 14-18 and 24-27 where the terminal is disclosed as the *receiving node*) from being affected (page 6, lines 12-13, *assure synchronization*) if the connection over the network is broken (page 32, lines 15-17, *communication error*) by also queuing messages in readiness for the connection to be reestablished (page 32, lines 20-24, *state of the message queue is therefor retained*), enabling the terminal program to proceed to its next task (page 32, lines 24-27, *automatically recover the state of the message processing*).
- 48. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Piskiel. The motivation to do so being, to provide a robust means of communicating data across a network by maintaining synchronization between messaging queues.

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49. With respect to claim 4, Logston discloses the system of claim 1, but does not disclose insulation from a broken network connection.

- 50. However, Piskiel discloses insulation of a server program (page 4, lines 14-18, where the server is disclosed as the *originating node*) from being affected (page 6, lines 12-13, *assure synchronization*) if the connection over the network is broken (page 32, lines 15-17, *communication error*) by also queuing messages in readiness for the connection to be reestablished (page 32, lines 20-24, *state of the message queue is therefor retained*), enabling the server program to proceed to its next task (page 32, lines 24-27, *automatically recover the state of the message processing*).
- 51. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Piskiel. The motivation to do so being, to provide a robust means of communicating data across a network by maintaining synchronization between messaging queues.
- 52. With respect to claim 5, Logston discloses the system of claim 1, but does not disclose data replication.
- 53. However, Piskiel discloses each message that is queued defines part or all of an event (page 4, lines 20-24, associated transaction), in which an event describes a change to the data stored at either the terminal or server (page 11, lines 4-6) in enough detail to enable data replication to take place without the need for a synchronisation engine (page 7, lines 9-15, "exactly once"); data replication being achieved by sending events rather than a complete dataset (or sub-sets of a dataset) of stored data for synchronization (page 8, lines 2-8, atomic operation).

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54. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Piskiel. The motivation to do so being, to provide a robust and efficient means of communicating data across a network by maintaining synchronization between messaging queues.

- 55. With respect to claim 6, the combination of Logston and Piskiel disclose the system of claim 5, Piskiel further discloses the terminal-side component can create events (page 12, lines 26-28) and queue those events (page 12, lines 26-28), itself and/or in the message queuing system (page 12, lines 26-28), enabling the terminal-side component to proceed to its next task (page 14, lines 26-27), even if the network connection is broken (page 32, lines 15-17, communication error).
- 56. With respect to claim 7, the combination of Logston and Piskiel disclose the system of claim 5, Piskiel further discloses the server-side component can create events (page 12, lines 26-28) and queue those events (page 12, lines 26-28), itself and/or in the message queuing system (page 12, lines 26-28), enabling the server-side component to proceed to its next task (page 14, lines 26-27), even if the network connection is broken (page 32, lines 15-17, communication error).
- 57. With respect to claim 8, the combination of Logston and Piskiel disclose the system of claim 6, Piskiel further discloses the queued events persist in non-volatile memory even when the terminal is switched off (page 33, lines 1-4).

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58. With respect to claim 9, the combination of Logston and Piskiel disclose the system of claim 7, Piskiel further discloses the queued events persist in non-volatile memory even when the server is switched off (page 33, lines 1-4).

- 59. With respect to claim 11, the combination of Logston and Piskiel disclose the system of claim 6, Piskiel further discloses the messages that are queued on the terminal side are references to data held on the server (page 13, lines 1-17, *updating of information stored*).
- 60. With respect to claim 12, Logston discloses the system of claim 10, but does not disclose insulation from re-establishment of the network.
- 61. However, Piskiel discloses a message queuing system (page 4, lines 16-18, *wraparound queue*) on the terminal side (page 4, lines 18-20, *receiving node*) insulates the terminal program from being affected (page 6, lines 12-13, *assure synchronization*) if the connection over the network is re-established (page 32, lines 24-25, *communication failure...is corrected*) by automatically causing the next message in a terminal-side queue to be sent (page 32, lines 24-27, *automatically recover the state of message processing*).
- 62. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Piskiel. The motivation to do so being, to provide a robust means of communicating data across a network by maintaining synchronization between messaging queues.
- 63. With respect to claim 13, Logston discloses the system of claim 10, but does not disclose insulation from re-establishment of the network.

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64. However, Piskiel discloses a message queuing system (page 4, lines 16-18, wraparound queue) on the server side (page 4, lines 16-18, originating node) insulates the server program from being affected (page 6, lines 12-13, assure synchronization) if the connection over the network is re-established (page 32, lines 24-25, communication failure...is corrected) by automatically causing the next message in a server-side queue to be sent (page 32, lines 24-27, automatically recover the state of message processing).

- 65. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Piskiel. The motivation to do so being, to provide a robust means of communicating data across a network by maintaining synchronization between messaging queues.
- 66. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 1 above, in view of Hutcheson et al (U.S. Patent No. 6,947,761, hereinafter Hutcheson).
- 67. With respect to claim 17, Logston discloses the system of claim 1, but does not disclose GPRS or UMTS.
- 68. However, Hutcheson discloses the network is a wireless WAN network (column 7, lines 24-25) such as a GPRS (column 7, lines 19-20) or UMTS network (column 7, lines 22-23).
- 69. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Hutcheson. The motivation to do so being, to provide a more versatile means of communicating over the network by having the ability to connect of preexisting wireless networks.

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70. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 1 above, in view of Suarez (U.S. Patent No. 5,790,789).

- 71. With respect to claim 18, Logston discloses the system of claim 1, but does not disclose a logon password.
- 72. However, Suarez discloses the server-side component stores (column 15, lines 58-60, database stored procedure) a logon password (column 16, line 32) sent from the terminal-side component (column 16, lines 10-13, at least one agent) and can use this logon to access a server program (column 16, lines 36-43, launching the service).
- 73. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Suarez. The motivation to do so being, to provide a more secure means of communicating over the network by having the ability to authenticate users.
- 74. Claims 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 1 above, in view of De Mendonca et al (U.S. Patent Application Publication No. 2004/0172453, hereinafter Mendonca).
- 75. With respect to claim 20, Logston discloses the system of claim 1, but does not disclose automatically deleting data.
- 76. However, Mendonca discloses the terminal-side component monitors available memory on the terminal (paragraph [0005]) and automatically deletes data stored on the terminal (paragraph [0016], lines 4-9, where data is disclosed as *e-mail body text*) that meets pre-defined criteria of age and/or use and/or size (paragraph [0016], lines 4-9, *usage based rules or time*

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schedules) without affecting the corresponding data stored on the terminal (paragraph [0016], lines 4-9).

- 77. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Mendonca. The motivation to do so being, to provide a more resourceful means of communicating over the network by purging extraneous data stores.
- 78. With respect to claim 21, the combination of Logston and Mendonca disclose the system of claim 20, Mendonca further discloses a user option to delete data stored on the terminal without affecting the corresponding data stored on the server (paragraph [0016], lines 4-9) is displayed at the same level in a menu hierarchy displayed on the terminal as an option to delete data stored on the terminal (paragraph [0017], lines 7-10) together with the corresponding data stored on the server (paragraph [0017], lines 11-15, *delete from the mail server*).
- 79. With respect to claim 22, the combination of Logston and Mendonca disclose the system of claim 20, Mendonca further discloses the data is message data and the terminal side component retains data that allows the message data to be re-supplied from the server if requested by a user (paragraph [0016], lines 4-15, header information).
- 80. With respect to claim 23, the combination of Logston and Mendonca disclose the system of claim 20, Mendonca further discloses the data is not released from memory if the data is marked as unread, open for user viewing or action, or there is a pending action related to the data requesting additional data from the large server (paragraph [0016], lines 4-15, where the data being marked as open for action is disclosed as *header information*).

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81. With respect to claim 24, Logston discloses the system of claim 1, but does not disclose various formats.

- 82. However, Mendonca disclose the terminal-side component enables a document attachment (paragraph [0016], lines 13-14) to be sent to the wireless terminal (paragraph [0002], lines 1-3, *wireless information devices*) in either the original format in which the document is stored at the server (paragraph [0016], lines 4-9, where the original format is disclosed by the e-mail prior to the *body text...[being]...deleted*) or in a more useable format converted from the original format (paragraph [0016], lines 4-9, where the converted format is disclosed by the e-mail after the *body text...[being]...deleted*).
- 83. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Mendonca. The motivation to do so being, to provide a more resourceful means of communicating over the network by enabling various formats of data to be maintained which require different amounts of storage on different devices.
- 84. With respect to claim 25, Logston discloses the system of claim 1, but does not disclose deleting messages.
- 85. However, Mendonca discloses the terminal-side component enables a user to (a) select a release option to delete a message stored on the terminal but not the corresponding message stored on the server (paragraph [0016], lines 4-9) and also to (b) select a delete option to delete a message stored on the terminal (paragraph [0016], lines 4-9) and also the corresponding message on the server (paragraph [0017], lines 4-15, *delete from mail server*), the release and

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delete options appearing at the same level in a menu hierarchy displayed on the terminal (paragraph [0017], lines 7-11).

- 86. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Mendonca. The motivation to do so being, to provide a more resourceful means of communicating over the network by enabling storage by various devices to be controlled though a menu.
- 87. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 26 above, in view of Guruprasad (U.S. Patent No. 6,802,068).
- 88. With respect to claim 27, Logston discloses the system of claim 26, but does not disclose a NAT box.
- 89. However, Guruprasad discloses the address is a dynamic IP address (column 3, line 20) allocated by a NAT box (column 13, lines 50-52).
- 90. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Guruprasad. The motivation to do so being, to provide a more versatile means of communicating over the network by allowing flexibility in assigning terminal addresses.
- 91. With respect to claim 28, the combination of Logston and Guruprasad discloses the system of claim 27, Guruprasad further discloses application only initiates a message transfer if there exists a valid mapping (column 15, lines 39-42, *QoS considerations*).

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92. With respect to claim 29 the combination of Logston and Guruprasad discloses the system of claim 28 in which a mapping is refreshed (column 19, lines 14-17, *automatically update the tables*) whenever a specific kind of small, dedicated message is received from the terminal (column 19, lines 14-17, *opens or closes a file descriptor*).

- 93. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 1 above, in view of Podgorny et al (U.S. Patent No. 6,078,948, hereinafter Podgorny).
- 94. With respect to claim 30, Langston discloses the system of claim 1, but does not disclose locking an application.
- 95. However, Podgorny discloses the terminal-side component allows a server administrator (column 15, lines 66-67) to lock an application on the terminal (column 13, lines 54-60) without affecting other applications on the terminal (column 7, lines 65-67, *implementation specific*).
- 96. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Podgorny. The motivation to do so being, to provide a more secure means of communicating over the network by allowing centralized control over limiting access to applications.
- 97. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 1 above, in view of Vange et al (U.S. Patent No. 7,020,783, hereinafter Vange).

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98. With respect to claim 31, Logston disclose the system of claim 1, but does not disclose a denial of service attack.

- 99. However, Vange disclose the terminal component sends a challenge (column 8, lines 17-20, *validate source addresses*) to any third party suspected of attempting a denial of service attack on the terminal (column 5, lines 60-63) and that denial of service attack does not then lead to any additional data traffic to the terminal (column 4, lines 12-15, *blocked quickly and/or automatically*).
- 100. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Logston with the teachings of Vange. The motivation to do so being, to provide a more stable means of communicating over the network by discontinuing any unwanted network traffic from transmitting.
- 101. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logston, as applied to claim 1 and 34 above, in view of Piskiel, in further view of Hutcheson, Suarez, Mendonca, Guruprasad, and Vange.
- 102. With respect to claim 35, the claim is rejected for the same reasons as claims 34, and 1-33 above.
- 103. With respect to claim 36, the claim is rejected for the same reasons as claims 1-33 above. In addition, Logston discloses a terminal (page 2, lines 1-3, *client devices*) programmed with a terminal-side component (page 1, lines 32-34, *DACP*).

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104. With respect to claim 37, the claim is rejected for the same reasons as claims 1-33 above. In addition, Logston disclose a server (page 2, lines 25-26) programmed with a server-side component (page 1, lines 32-34, *DASP*).

105. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Chandra et al Patent Pub. 2002/0138582

b. Rigaldies et al Patent No. 6,792,085

c. Norin et al Patent No. 5,832,514

106. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLAKE RUBIN whose telephone number is (571)270-3802. The examiner can normally be reached on M-R: 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BJR

/Nabil El-Hady, Ph.D, M.B.A./ Supervisory Patent Examiner, Art Unit 4152